

Seafood: Chinook Salmon, Lower Columbia River Fisheries

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What are the Columbia River fisheries?

Three fisheries in the Columbia River provide Chinook salmon to retail consumers: Non-tribal fishers work in the mainstem river from Astoria to Bonneville Dam. Tribal fisheries operate upstream, between Bonneville and McNary Dam. Downstream near the river mouth, a small “Select Area” fishery operates in side-channels and bays off the main river channel, targeting Chinook returning to local hatcheries and avoiding fish bound upstream.

What is the catch method used by Columbia River fishers?

The fishers who supply these Chinook for consumers primarily use gillnets. They fish under rigorous rules that limit impacts on endangered and threatened fish populations. Times, locations, mesh sizes, and other fishing practices are regulated tightly to ensure sustainability.

Where does PCC get their Columbia River Chinook salmon?

The Columbia River fall Chinook salmon sourced by PCC come from a small-boat gillnet fishery on the lower Columbia River (below Bonneville Dam) that is documented and regulated to carefully limit incidental impacts on threatened Snake River fall Chinook and other depleted salmon populations, helping to ensure that these fish can continue rebuilding to healthy levels.

Aren't Columbia River Chinook important for the Southern Resident killer whales?

Yes, many Pacific Northwest fisheries are important to the Southern Residents. However, the Southern Residents get a shot at these fish before they enter the river. Chinook caught in the Columbia River have already passed through the Southern Residents' ocean feeding grounds, and these fish-eating whales have never been documented inside the river. Catches are carefully limited to leave enough fish to sustain and rebuild salmon runs through both wild spawning and hatchery broodstock.

Your signage in the store says the fish is “wild” Columbia River Chinook—what does that mean?

When PCC uses the term “wild” to describe the fish for sale, this designation means that the fish has been caught in the wild, not farm-raised. In the fisheries management context, however, “wild” usually means a fish with naturally-spawned origins, as opposed to hatchery-spawned origins. “Wild” designations on our retail shelves indicate only that the fish was caught in the wild and not raised in a salmon farm.

Are the Columbia River Chinook endangered?

Since the early 1990s, 13 groups of Columbia Basin salmon and steelhead stocks have been listed as threatened or endangered under the Endangered Species Act (ESA).

Hatcheries and healthy natural populations in the Columbia still produce some of the largest salmon runs on the West Coast, enough to support a careful, targeted harvest. Protecting the threatened and endangered populations does constrain access to abundant salmon runs that swim home at the same time. These protections help ensure enough returning spawners can reach home to rebuild weak populations. Data reviewed during our evaluation of these fisheries showed that during 2008-2016 an estimated 90.4% of natural-origin Chinook entering the Columbia were protected from in-river fishing.ⁱ

Can ESA-listed Chinook be caught?

The Columbia River commercial fishers from whom PCC sources fall Chinook are prohibited from targeting ESA-listed salmon and steelhead. Additionally, regulations strictly limit their incidental impacts (bycatch) on ESA-listed fish to ensure that populations can rebuild. That said, even the most selective fisheries incur some incidental impacts on non-target species (including ESA-listed Chinook), so it was important to us to carefully examine the most recent catch and mortality data and evaluate them against the stringent standard we developed to ensure minimal impacts on ESA-listed Chinook stocks.

Research conducted by our partners at NFCC showed (see the Lower Columbia River fishery evaluation [here](#)) that impact limits set under the ESA now play a key role in ensuring that enough Chinook can swim home and spawn. The Columbia River fall Chinook sourced by PCC in 2020 came from a fishery that is carefully regulated to protect Snake River wild fall Chinook, a listed population. For these recovering fish, the gillnetters below Bonneville account for the smallest slice of allowed incidental impacts among all fisheries in the river: less than one third the impact of in-river recreational fisheries in 2019.

This fishery's total incidental impact in 2019 was estimated at 266 mortalities from the Snake River fall Chinook population,ⁱⁱ out of a total estimated return of 15,231 to the Columbia river mouth. That put this fishery's impact at 1.75% of the return.ⁱⁱⁱ The commercial fleet's 2019 total fall season catch amounted to 8,824 Chinook,^{iv} indicating that Snake River wild Chinook accounted for approximately 3% of the catch.

While salmon returns fluctuate from year to year, most ESA-listed Chinook stocks in the Columbia Basin have increased since listing, an indication incidental impacts from fishing are controlled at low enough levels to allow continued recovery. We are also confident that if any declines in Chinook populations become continuous or concerning, the National Marine Fisheries Service will utilize the protective tools of the ESA to further tighten incidental impact limits (including potential closure of the fishery) to help ensure that enough fish survive to spawn.

Isn't it better to just stop selling Columbia River Chinook?

If research showed that boycotting Columbia River Chinook could save the ESA-listed Chinook and Southern Residents, we would have continued our moratorium for these fish. Instead, NFCC's research and evaluation against our rigorous standard showed the Columbia River fisheries to be carefully managed to help achieve rebuilding of ESA-listed stocks in the Columbia Basin. At the same time, the continuation of harvests underpins massive societal investments in restoration, habitat protection, hatchery production, and conservation work that are key to recovery.

We also learned that while targeted, place-based sourcing and protective fishery management practices are an important part of restoring threatened or endangered Chinook stocks, multiple sources of mortality affect salmon returning to the Columbia Basin. Among them are marine foodweb changes linked to climate change, dam-induced mortality, fish kills caused by overheated streams and river waters, elevated predator populations in some areas, and a

string of fisheries as far away as British Columbia and Southeast Alaska. Recovery has not been a straight line, and it is still possible (even likely) that fishing will need to be cut sharply or even halted in the future if mortalities from any or all of these sources grow too much.

We know and respect some conservationists and consumers who believe that no fishing of Columbia River Chinook should be permitted. Some hold that certain fishing methods, such as gillnetting, cannot possibly be sustainable in an era of ESA-listed fish runs, climate change and other threats. However, we also have listened to many conservation and fishery experts, scientists and veteran fishery regulators who hold a different view. Fundamentally, they note that conservation is achieved by tightly controlling fishing impacts—not by simply shifting the allowable impacts among competing gear types. Proponents of this view include biologists and resource managers from sovereign tribal nations who co-manage salmon fisheries in the Northwest and who have been stewards of this resource longer than anyone.

As a conscientious retailer, PCC seeks to source fish and raise its voice in ways that help curtail systemic threats both to Chinook salmon and to the endangered Southern Residents that rely on them. We do not pretend that this is easy, simple or quick. The patient work ahead will require us to seek solutions that enfranchise—rather than divide—consumers and producers in the “forever” work of learning to become genuine stewards.

Can I review NFCC’s evaluation of the Columbia River fishery?

Yes! We believe that solutions to difficult problems like those facing the Southern Residents and Chinook are often found through sharing information and open discussion. You can find the summary evaluations for three of the four PCC Chinook Sourcing Standard approved fisheries [here](#), as well as the full Lower Columbia River fishery evaluation that includes charts and data comparisons.

ⁱ NMFS 2018. Biological Opinion on 2018-2027 US v Oregon Management Agreement for Columbia River salmon fisheries, NOAA National Marine Fisheries Service, Feb 23, 2018. Data presented were calculated from 2008-2016 average returns and fishery removals reported at pp. 399-400. <https://www.fisheries.noaa.gov/resource/document/consultation-effects-2018-2027-us-v-oregon-management-agreement>

ⁱⁱ ODFW 2020. *Data from table of fishery impacts provided per data request for PCC fishery evaluation.*

ⁱⁱⁱ *Ibid*

^{iv} WDFW & ODFW 2020, *2020 Joint Staff Report: Stock Status and Fisheries for Fall Chinook Salmon, Coho Salmon, Chum Salmon, Summer Steelhead, and White Sturgeon*, Joint Columbia River Management Staff, WDFW and ODFW, Chinook nontreaty commercial catch data from Table 15. https://wdfw.wa.gov/sites/default/files/2020-07/2020_or_wa_fall_jointstaffreport.pdf